

## MOLIONE LEMBODA SP. NOV., A NEW SPIDER (ARANAEAE, THERIDIIDAE) FROM XISHUANGBANNA OF YUNNAN, CHINA

GAO Cai-Xia, LI Shu-Qiang\*

Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China

**Abstract** A new spider species, *Molione lemboda* sp. nov., from Xishuangbanna of Yunnan, China is described and illustrated. The specimens are deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing (IZCAS).

**Key words** Taxonomy, *Molione*, new species, tropical rainforest, China

### 1 Introduction

*Molione* is a small genus with 5 species from Southeast Asia (Platnick, 2009). Most species have 3 distinct protrusions on the opisthosoma. *Molione* differs from other genera by the absence of colulus, extremely sclerotized epigastric area and presence of a sclerotized ring around spinnerets (Yoshida, 2003; Agnarsson, 2004).

Two species were collected by Dr ZHENG Guo from the tropical rainforest of Xishuangbanna in 2007: *Molione triacantha* Thorell, 1892, and *Molione lemboda* sp. nov. The new species is described and illustrated in this paper.

### 2 Material and Methods

The specimens studied here are deposited in the Institute of Zoology, Chinese Academy of Sciences in Beijing (IZCAS). Specimens were examined using Leica M 205C stereomicroscope. Further details were studied under Olympus BX51 compound microscope. All illustrations were made using a drawing tube and inked on ink jet plotter paper. Vulvae of females were cleared in lactic acid. Type specimen photos of the species can be viewed at <http://www.ChineseSpecies.com> (Li & Wang, 2009).

The following abbreviations are used in the text: ALE-anterior lateral eyes; AME-anterior median eyes; PLE-posterior lateral eyes; PME-posterior median eyes.

### 3 Taxonomy

*Molione lemboda* sp. nov. (Figs 1-6)

**Diagnosis** This new species is similar to *Molione kinabalu* Yoshida, 2003, but can be distinguished by the presence of 3 acute protrusions on opisthosoma, the shuttle-shaped theridiidae tegular apophysis, short copulatory duct with opening to anterior atrial margin.

**Description.** Male (holotype). Total length 2.60. Prosoma 1.05 long, 0.90 wide, yellow brown, anterior part of prosoma flat, slightly extruded. Sternum 0.50 long, 0.50 wide, yellow to black. Opisthosoma 1.55 long, 0.90 wide, pale with black and white spots and a broad middle stripe from dorsal view, with sclerotized ring around pedicel and 3 acute protrusions on the tip. Eyes developed: AME 0.13, ALE 0.10, PLE 0.08, AME-AME 0.08, AME-ALE 0.05, PME-PM 0.06, PME-PLE 0.10. Clypeus height about 2.31 times AME diameter. Leg femur 1.55, patella 0.38, tibia 1.13, metatarsus 0.83, tarsus 0.43. Patella and tibia - : 1.05, 0.75, 1.33. Legs yellow, distal part of femur, patella, base and distal part of tibia with a black ring, patella - with 2 long spines, tibia - with 2 long spines. Palp with broad subtegulum; tegulum broad, with a membranous projection; vas deferens curved into a converse "S" in ventral view; theridiidae tegular apophysis shuttle-shaped; conductor besieged distal embolus; middle of embolus visible between theridiidae tegular apophysis and conductor (Figs 3-4).

Female (paratypes). Total length 2.70-3.90. Prosoma 1.10-1.30 long, 0.90-0.95 wide. Opisthosoma 1.75-2.65 long, 1.30-1.75 wide. Eyes developed. Epigynum flat; spermatheca orbicular; copulatory duct slender, opening to anterior atrial margin laterally; fertilization tube short, curving medially (Figs 5-6).

**Variation** (male paratypes). Total length 2.40-2.75; prosoma 0.90-1.10 long, 0.90-0.95 wide; opisthosoma 1.45-1.60 long, 0.95-1.75 wide.

**Type material** China (Yunnan). Male holotype, Menglun Nature Reserve (21°54'N, 101°16'E), 27 July 2007. Paratypes: 12 males and 5 females, the same data as holotype; 1 male, Menglun Nature Reserve (21°57'N, 101°12'E), 30 July 2007;

The project was supported by National Science Fund for Fostering Talents in Basic Research (Special Subjects in Animal Taxonomy, NSFC-30630964/J0109) and National Natural Sciences Foundation of China (NSFC-30970319).

\* Corresponding author, Email: lisq@ioz.ac.cn

Received 7 Sep. 2009, accepted 12 Oct. 2009.



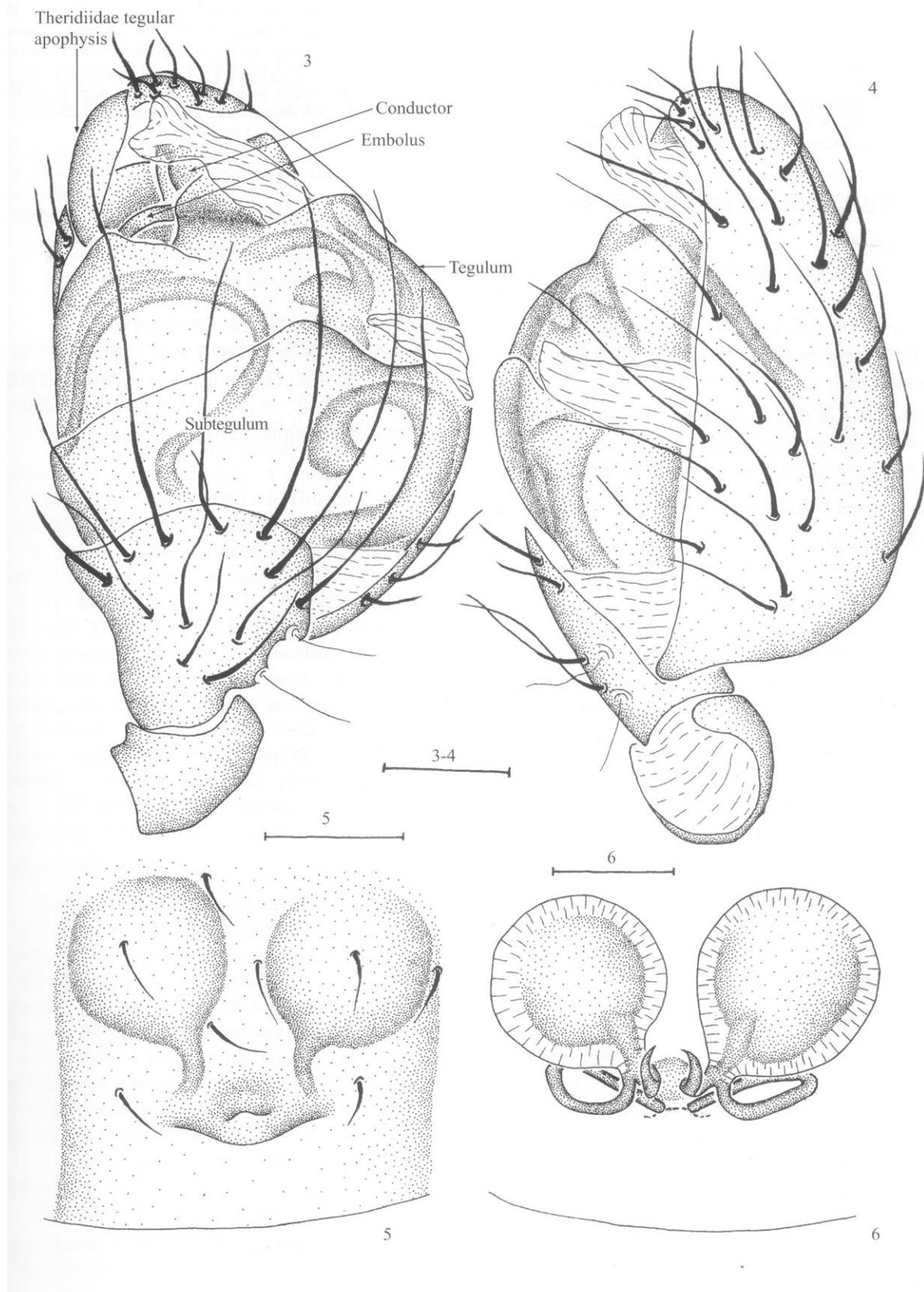
Figs 1-2 *Molione kmboda* sp. nov. 1. Male, dorsal view. 2. Female, dorsal view. Scale bars = 0.5 mm.

1 female, Menglun Nature Reserve (21°55' N, 101°16' E), 22 July 2007; 1 female, Menglun Nature Reserve (21°54' N, 101°17' E), 28 July 2007. All the types were collected by ZHENG GUO.

**Etymology.** The specific name derives from Latin

adjective *kmbodes* and means cymbose, in reference to the theridiidae tegular apophysis

**Distribution.** Known only from the type locality (Yunnan).



Figs 3-6. *Molione kmboda* sp. nov. 3. Palp, ventral view. 4. Palp, retro-lateral view. 5. Epigynum, ventral view. 6. Epigynum, dorsal view. Scale bars = 0.1 mm.

## REFERENCES

Agnarsson, I. 2004. Morphological phylogeny of cobweb spiders and their relatives (Araeae, Araneoidea, Theridiidae). *Zoological Journal of the Linnean Society*, 141: 447-626.

Li, S-Q and Wang, X-P. 2009. Endemic spiders in China. Online at <http://www.ChineseSpecies.com> (accessed 26 Aug 2009).

Platnick, N. I. 2009. The world spider catalog, version 10.0. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog/index.html> (accessed 26 Aug 2009).

Yoshida, H. 2003. A new genus and three new species of the family Theridiidae (Arachnida: Araeae) from North Borneo. *Acta Arachnologica*, Tokyo, 52: 85-89.

## 中国云南齿腹蛛属一新种 (蜘蛛目, 球蛛科)

高彩霞 李枢强\*

中国科学院动物研究所动物进化与系统学重点实验室 北京 100101

**摘要** 记述描绘了采自云南热带雨林的齿腹蛛属1新种, 舟突齿腹蛛 *Molione lmboda* sp. nov.。模式标本保存在中国科学院动物研究所。

**舟突齿腹蛛** *Molione lmboda* sp. nov. (图1~6)

新种与该属基纳齿腹蛛 *Molione kinabalu* Yoshida, 2003非常近似, 但是新种腹部末端有3个锥形突起; 球蛛盾片突为

**关键词** 分类学, 齿腹蛛属, 新种, 热带雨林, 中国.

**中图分类号** Q959.226

反转的舟形; 雌性交媾管较短, 伸向陷窝两侧。

**正模** , 云南勐仑自然保护区, 2007-07-27。副模: 12 , 5 , 采集信息同正模; 1 , 云南勐仑自然保护区, 2007-07-30; 1 , 云南勐仑自然保护区, 2007-07-22; 1 , 云南勐仑自然保护区, 2007-07-28, 采集人郑国。

\* 通讯作者.